African Invertebrates Vol. 43 Pages 1–3 Pietermaritzburg December, 2002

The true identity of the Ethiopian centipede *Scolopendra gardullana* Attems (Chilopoda: Scolopendromorpha: Scolopendridae)

by

John G. E. Lewis

(Somerset County Museum, Taunton Castle, Castle Green, Taunton, Somerset TA1 4AA, UK; for correspondence: Manor Mill Farm, Halse, Taunton, Somerset, TA4 3AQ, UK; Johngelewis@aol.com)

ABSTRACT

The Ethiopian centipede *Scolopendra gardullana* Attems is shown to be a junior synonym of *Scolopendra afer* (Meinert), a widespread African species.

INTRODUCTION

Scolopendra gardullana Attems, 1909 was described from Gardulla in southern Ethiopia. The description, which was repeated in Attems (1930), appears to have been based on a single specimen.

Lewis (2001) gave details of two specimens of *Scolopendra afer* (Meinert, 1886) from Moshi, Tanzania, noting that although they compared well with Attems' (1930) description (as *Trachycormocephalus afer*) they ran down to *Scolopendra gardullana* in Attems' key, and suggested that the two species might be conspecific. Lewis (1986) showed that *Trachycormocephalus* was a junior synonym of *Scolopendra.*

Dr Jason Dunlop kindly arranged a loan of what is regarded as the holotype of *S. gardullana*, in the collection of the Museum für Naturkunde, Humboldt-Universität, Berlin. It is here redescribed and its status reassessed.

TAXONOMY

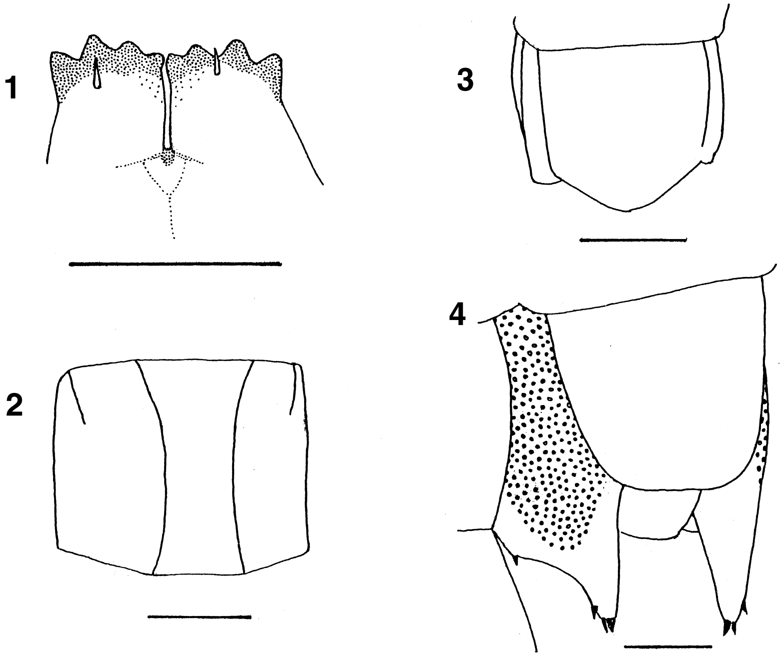
Material Examined: One specimen (regarded as holotype) labelled: *Scolopendra gardullana* n.sp. Attems. ZMB Kat Nr 4711. Syntypus. Gardulla 11.1.1901. O. Neumann.

Description (Attems' (1909) data in parentheses where appropriate):

The specimen lacks most of it legs and the anterior part is bent ventrally. Length 40 mm approx. (50 mm).

Antennomeres 17, the basal 6 glabrous, the antenna reaching back to tergite 2. Head capsule without sutures. Ocelli very small. Coxosternal teeth 4+4. Basal sutures of tooth plates forming an obtuse angle, with short, weak longitudinal suture (Fig. 1). Forcipular femoroid process not clearly visible (no inner teeth).

Tergite 1 just overlapping hind border of head capsule. Tergites 2–20 with complete paramedian sutures, those on 2–7 diverging anteriorly (Fig. 2). With short anterior lateral sutures on 2–17 (the *kurzen vorderen Schrägfurchen* of tergites 3–15 described by Attems (1930) for *T. afer*). Only tergite 21 marginate, without median suture, the hind border angular, its apex rounded (Fig. 3).



Figs 1–4. *Scolopendra gardullana*, holotype. Fig. 1. Coxosternal toothplates. Fig. 2. Tergite 5. Fig. 3. Tergite 21. Fig. 4. Segment 21, ventral view. [Scale lines: Figs 1 and 4 = 0.5 mm, Figs 2 and 3 = 1.0 mm].

Sternites 2–20 with complete paramedian sutures. Sternite 21 with sides somewhat convergent, the hind border straight (rhomboidal) (Fig. 4). Coxopleuron with 2 end spines, 1 subapical spine and 1 side spine (3 spines on the end and 2 on dorsal ridge is incorrect).

Ultimate leg prefemur with 2 ventrolateral, 2 ventral, 3 or 4 ventromedial, 3 dorsomedial spines and a two-spined prefemoral process.

Legs without femoral or tibial spines, 1–19 with one tarsal, 20 and 21 without (19 and 20 without tarsal spine). All legs with 2 claw spines.

Remarks: Attems (1909) description of *S. gardullana* gives no indication that he examined more than one specimen. The vial containing the species, however, has a label '*syntypus*' and Moritz and Fischer's (1979) list of myriapod types in the Zoology Museum Berlin give: *1 exemplar, Syntypus*. Dr Verena Stagl informs me that there are no specimens in the Natural History Museum in Vienna (which houses Attems' collection). She states that it was not his practice to send syntypes to other museums, and presumes that he had to return the O. Neumann material to Berlin. It seems very probable then, that Attems had before him only a single specimen, and that it was therefore the holotype, and it is here regarded as such.

As noted above Attems' statements that *S. gardullana* has two spines on the dorsal ridge of the coxopleuron and that leg 19 has no tarsal spine are incorrect. It has no dorsal spines on the coxopleuron and has a tarsal spine on leg 19.

The specimen of *S. gardullana* is clearly *S. afer*, which is a well defined species. It lacks cephalic sutures, but this falls within the variation indicated for *T. afer* by Attems

(1930), who wrote 'often with an indication of a fine median suture and a transverse suture in the posterior corners'. His figure 72 shows the coxopleural pore field with a short median posterior pore free area. This would appear to be an error.

Gardulla is within the known geographical range of *S. afer,* which has been recorded from southern Sudan, Ethiopia, Somalia, Uganda, Zaire, Kenya, Zambia, Tanzania, Angola and north-eastern South Africa.

Scolopendra gardullana is thus a junior synonym of *S. afer*.

ACKNOWLEDGEMENTS

My thanks are due to Dr Jason Dunlop (Museum für Naturkunde, Humboldt-Universität, Berlin) for the loan of *S. gardullana*, and to Dr Verena Stagl of the Naturhistorisches Museum, Vienna, for information on Attems' collection. I am also indebted to Professor Alessandro Minelli (Padova) for advice on taxonomy and to Mr Dennis Parsons and staff of the Somerset County Museum, Taunton for providing excellent working facilities.

REFERENCES

ATTEMS, C. G. 1909. Äthiopische Myriopoden. Gesammelt von Prof. O. Neumann und K. v. Erlanger. *Zoologischer Jahrbücher Abteilung für Systematik, Geographie und Biologie der Tiere* **27** (4): 391–418.

ATTEMS, G. 1930. Scolopendromorpha. *Das Tierreich* **54**. Berlin: Walter de Gruyter.

LEWIS, J. G. E. 1986. The genus *Trachycormocephalus* a junior synonym of *Scolopendra*, with remarks on the validity of other genera of the tribe Scolopendrini (Chilopoda: Scolopendromorpha). *Journal of Natural History* **20**: 1083–1088.

——— 2001. The scolopendrid centipedes in the collection of the National Museum of Natural History in Sofia (Chilopoda: Scolopendromorpha: Scolopendridae. *Historia Naturalis Bulgarica* **13**: 5–51.

MORITZ, M. & FISCHER S. C. 1979. Die Myriapoden-Sammlung des Zoologischen Museums Berlin II. Chilopoden. *Mitteilungen aus dem Zoologischen Museum in Berlin* **55** (2): 297–352.